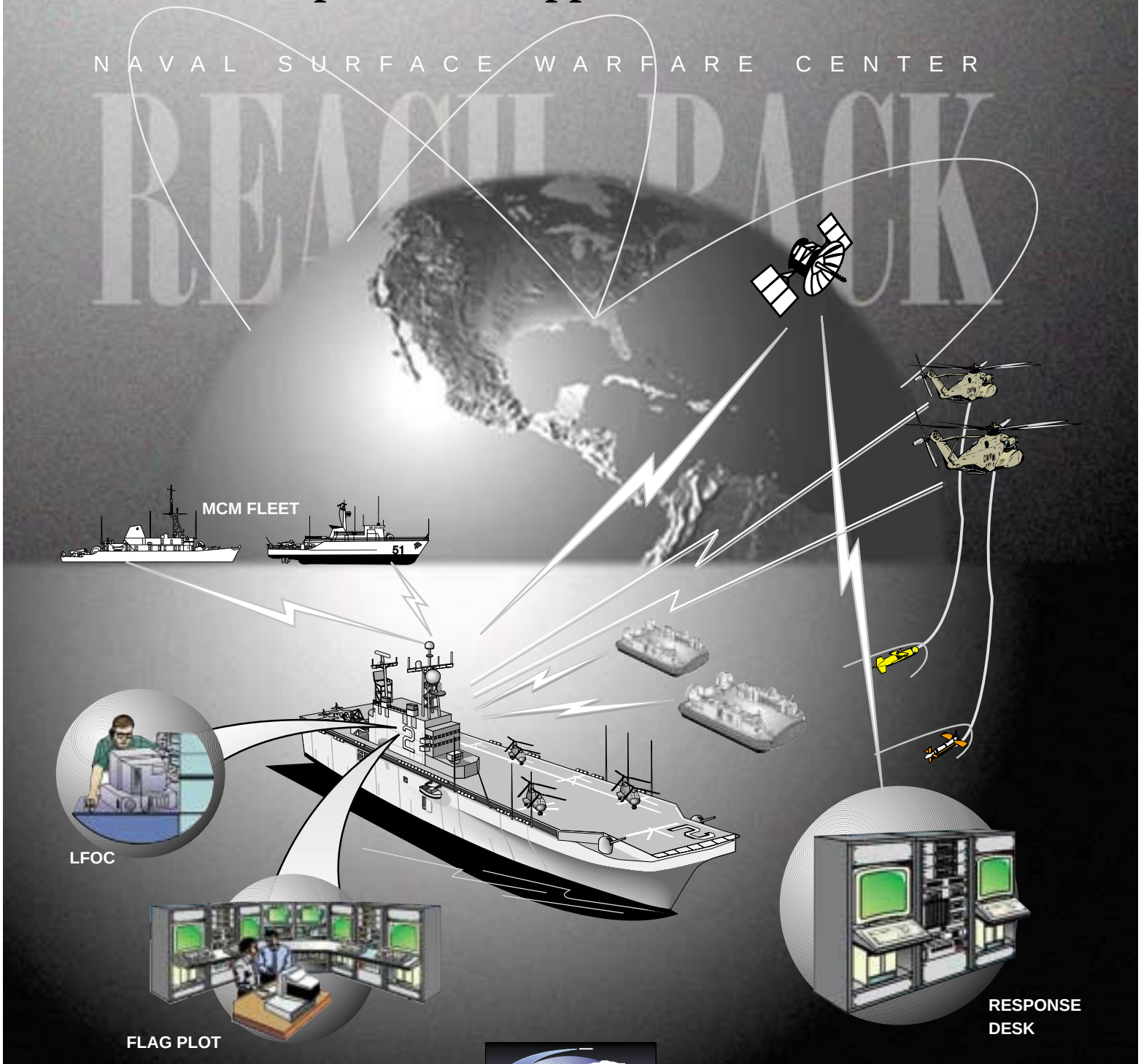
NAVAL SEA SYSTEMS COMMAND

Reach Back

The Next Step in Fleet Support

NAVAL SURFACE WARFARE CENTER



NAVSEA PANAMA CITY Coastal Systems Station

DAHLGREN DIVISION

DAHLGREN PANAMA CITY DAM NECK

Providing Real-Time Support to the Operating Fleet

Background

The major changes in the world's political and military environments during recent years have significantly altered the roles of the U.S. Navy as an instrument of National policy. For the foreseeable future, the national interest requires that the U.S. Navy be capable of directly impacting events ashore. This role in turn requires that naval forces be capable of sustained operations in the littoral regions of the world. In the littorals, sea mines are the single most attractive weapons available to adversary nations for the purpose of preventing U.S. naval forces from accomplishing their objectives. The U.S. Mine Countermeasures (MCM) forces are a pivotal component of the Navy's forward-deployed forces.

The Need

The diversity and rapidly evolving nature of the mine threat requires that the forward-deployed MCM forces utilize every means possible to ensure access to the most recent threat information and data with reciprocal tactical options and strategies. In addition, operational situations are often encountered that prompt the MCM operators to forward inquiries relative to operational systems and equipment, and logistical, tactical, and threat needs to shore based technical experts resident at the Naval Surface Warfare Center Dahlgren Division Coastal Systems Station (NSWCDD CSS). In the past, these inquiries have been relayed by naval message.

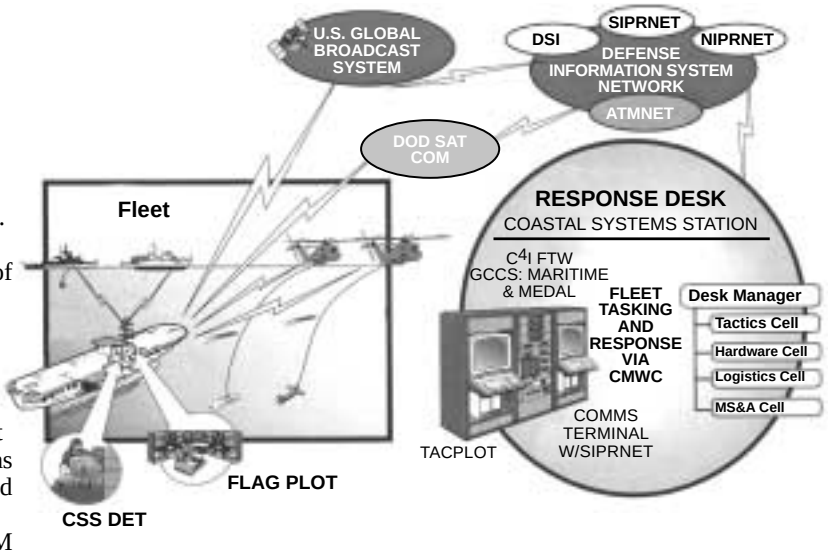
The Opportunity

Commensurate with the rapidly evolving Defense Information System Network (DISN) connectivity improvements, the MCM community is now in a position to revolutionize the manner in which the shore-based infrastructure provides timely support to the forward-deployed forces. The USS INCHON (MCS 12) provides the MCM operational commander with a greatly improved Command, Control, Computer and Communication Intelligence (C^4I) capability. This C^4I capability makes it conceptually feasible to provide a powerful tool whereby the MCM simulation-based analysis, tactical, technical, and threat expertise of the NSWCDD CSS becomes directly and immediately available to the forward-deployed MCM operating forces. This potential Fleet support capability casts the Navy's shore-based MCM experts at NSWCDD CSS as adjunct staff to the operating forces for the purposes of assisting in the solution of tactical, material, and logistical problems in real-time as they are encountered during MCM operations.

The Demonstration

COMINEWARCOM (CMWC), COMCMRON-2, and NSWCDD CSS with the assistance and cooperation of the USS INCHON (MCS-12), demonstrated during GOMEX 1-97 and Blue Harrier, the feasibility of providing such real-time tactical and technical support to the operating Fleet.

This capability, dubbed "Reach Back," linked the flag plot on the USS INCHON in real time, with response cells at NSWCDD CSS manned by MCM tactician developers, MCM hardware experts, and mine threat experts. Since this initial demonstration, Reach Back has evolved into a center of CONUS information. Along with access to system and warfare area experts, Reach Back also provides access to a database, via SIPRNet Web site, containing information such as: mine photos, detailed mine information, and 3 D flythroughs of various areas around the world. In the near future, Reach Back will provide access to an array of Modeling and Simulation (M&S) computers, download capability in support of the latest versions of software tools and databases, and user interface to vulnerability assessment tools such as TMSS. Reach Back has expanded from support of MCM operations to the capability of supporting other warfare areas as well. Most recently, Reach Back was used during the JTFEX 98-1 exercise in support of the R2P2 for the ESSEX ARG/MEU.



The Future

As the Navy's maritime component of the Global Command and Control System (GCCS) emerges, the feasibility and operational viability of the “Reach-Back” concept will rapidly evolve and mature. Implementation of a mature “Reach Back” capability will place the MCM community at the forefront in the utilization of the shore-based technical, research, development, test, evaluation and maintenance infrastructure to support forward operations.

NAVSEA PANAMA CITY Coastal Systems Station

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